2023 Fall Session 2: QuickSight

1. **Q - Is the publishing pathway established at the organization level or the individual level?**
   A - It is at the organization level. Whatever HARP organization you are associated with, you will have those same permissions in QuickSight.

2. **Q - Can you only select one table?**
   A - You can create a dataset using multiple tables from a schema in CCSQ Data Warehouse. You can also create an analysis using more than one dataset. You do this by selecting Data from the blue bar at the top of your screen and selecting Add Dataset.

3. **Q - Can you join tables?**
   A - You can join tables to create a dataset within QuickSight. You do this by selecting Use in Dataset from the Use In Analysis drop-down in your Analysis.

4. **Q - Can you also connect to additional data sources e.g., Amazon Web Services (AWS), Relational Database Service (RDS) DataSources from QuickSight?**
   A - Yes. You can add additional sources by clicking Add data on the upper-right hand corner of the page. From the drop-down menu, you can choose to add data from a dataset, data source or upload a file.

5. **Q - Can we request more space in the Super-fast, Parallel, In-memory Calculation Engine (SPICE)?**
   A - At the application level, we can always get more SPICE storage capacity, but at the individual dataset level, you cannot exceed five hundred million rows or five hundred gigabytes. That is a limitation put on every user within QuickSight and it is not negotiable.

6. **Q - Could you give an example dashboard where SPICE is advisable to use maybe?**
   A - It depends on the visualization and the data. If SPICE is available to you, and it meets those SPICE dataset limits, use SPICE. SPICE is used for smaller datasets that you could use as a direct query from Redshift. SPICE, because it is in-memory, does have better performance in terms of refreshing and reloading data. If you do not have SPICE available, then you are limited to just direct query. A direct query is for large datasets and Redshift, meaning data that exceeds five hundred million rows or five hundred gigabytes. One of the benefits and one of the differences with doing the direct query from Redshift is that it will automatically pull in all the records from that data source every time the dashboard is used so you do not have to schedule a refresh like in SPICE.

7. **Q - Can QuickSight connect to an Application Programming Interface (API) to pull in publicly available data on the web or our organization's Consolidated Reference Model (CRM)?**
   A - The limitations on what is available to set up within QuickSight are the new data sources. These do get updated with some frequency by Amazon, but not necessarily

directly, through any API. It must be through supported products.

8. **Q - Does direct query still have the Glue problems that require my dataset to be refreshed?**
   A - Yes, the direct query still does. The direct query versus SPICE is just contained to QuickSight and loading in the data to your dashboard.

9. **Q - Can the data be pulled from heterogeneous Cloud data such as Azure Dataverse or Google Clouds etc.?**
   A - Yes. We currently do not have an example of this within the CCSQ environment. If that is your case, please reach out for assistance via the QuickSight help channel in Slack or submit a ServiceNow ticket and we can work with your groups. There are permissions that will need to be established before bringing in materials from outside of the CCSQ environment.

10. **Q - Are there plug-ins to do that connectivity?**
    A - QuickSight can be set up to work with several different data sources, but we will need to work with you to securely establish the connection to these different data sources so reach out to us when you need to set this up. For assistance, please reach out via the QuickSight help channel in Slack or submit a ServiceNow ticket.

11. **Q - Are there any guidelines for arranging your data for QuickSight and other visual software available?**
    A - There are few guidelines because everyone's data is going to be different. However, it is important to avoid bringing in an entire Centralized Data Repository (CDR) table to then build off just one or two columns of data. Bringing in extra data that will not be used could slow down the performance in the loading and filtering of a dashboard.\

12. **Q - I am having trouble understanding the use cases for the QuickSight syntax for calculated dimensions/measures, what and where I can aggregate data, at what levels I can filter, and how to use parameters and actions most effectively. I am looking for learning resources at a more advanced level.**
    A - This depends on your particular use case and what you are trying to do for your particular use case depends upon what you are trying to do and build versus the state that your data is in.

    You can create parameters in QuickSight so that if you have multiple pages within your dashboard and you can set controls that are on Sheet One, but then drive the data and it automatically applies those same filters on those additional sheets. It is helpful if you are building your dashboard in a way to walk your users through filtering and representation of different data, but you do not want to put it all on one page. It creates a more user-friendly interactive dashboard, so they do not have to go in and refilter on each subsequent page of the dashboard and they do not have to keep selecting all the controls, for each page of the dashboard.

    Next are actions and changing settings. Actions are things that you can learn more about through the AWS documentation provided. Settings and the layouts can also be changed, not just at the time that you create your sheet or add a new sheet to your analysis. You can always come back and change the format of a sheet after you have already started to create it. You do not have to start from nothing either. You can go in and change these settings, dynamically.

Additional learning resources can be found in the QuickSight User guide sections, Preparing Data, Working with Visuals and Release Notes.

13. **Q - How would we share outside of HARP?**
A - For end users that do not have a HARP ID/account, the only way to share a dashboard is if the dashboard is embedded on a publicly embedded website. This feature is not currently activated for CCSQ QuickSight, but it is being worked on.

14. **Q - Question about boxplots: why do the tails of the distributions get mixed up when sorting?**
A - We have not been able to recreate this issue post-meeting. Reach out for assistance via the QuickSight help channel in Slack or submit a ServiceNow ticket.

15. **Q - We have developed some QuickSight dashboards, and our testers are able to internally review using the folder structure. After this, how do we share the dashboards with our end users at CMS?**
A - You will need to publish that dashboard in your Production folder and then anyone who is a viewer for your organization will have access to it.

16. **Q - We are a contractor for CMS, and I believe our end users at CMS are by default not part of the Production folder to become a viewer. We have developed some QuickSight dashboards, and our testers are able to internally review using the folder structure. After this, how do we share the Dashboards with our end users at CMS?**
A - That is correct. If there is a subset of CMS users that you need to share your dashboards with, have them request the Viewer role for your HARP organization under CCSQ QuickSight. If you need to share it with everyone in CMS, reach out to the QuickSight help channel in Slack or submit a ServiceNow ticket. There is a user group that includes everyone in CMS and the team can help get you connected and then they will be able to access your shared folder products the subfolder, for production and access any dashboards you have for them.

17. **Q - How do you establish that connection to the CCSQ Data Warehouse?**
A - Reach out to the QuickSight help channel in Slack or submit a ServiceNow ticket. The team will have to confirm that you have your publishing workbench folder set up on the CDR side. From there the team will have to create the shared folder on the user groups and then create that link to your published workbench folder.

18. **Q - What is the best way and who is the best person to reach out to?**
A - The best way to reach out for quick responses is Slack. There is a QuickSight Slack

channel, CCSQ QualityNet page and the STAR team has access to them.

19. **Q - Is there any version management available in Quicksight for release management?**
A - QuickSight has version history available for datasets. That feature is not currently available for analysis. For now, you can do a manual version control. Before you start changing an analysis, make a copy of an existing analysis and add a version number to the file, for example, 1.1. Make your visualization changes in that new analysis and then once you have worked it out, replace the current dashboard with the one you just created in this new analysis. That is where you can publish and then replace it as an existing dashboard and that has access to both different versions.

20. **Q - Can we download the QuickSight dashboard file for offline use or share? I know Microsoft PowerBI dashboard files can be downloaded as Power BI eXchange (PBIX) files. Do we have a similar case in QuickSight ?**
A - Yes. You can print off a PDF of your dashboard and share it. You can also share the embedded dashboard in other applications so that others can use interactive controls within the dashboard. There is not an option to download the interactive dashboard outside of QuickSight to use like natively on a desktop.

21. **Q - Could you provide the hyperlinks from the slides?**
A - You can access all the hyperlinks in the demo through the Data Camp slide deck.